

### Amendments to the Claims

Please cancel claims 86 - 180.

### Listing of Claims

This listing of claims will replace all prior versions and listings of claims in the application:

1 - 180 (Cancelled)

181. (New) A system that determines a cost of insurance comprising:  
a device that writes and records one or more characteristics related to a level of risk of operating a vehicle through an automotive communication link;  
means for a party associated with the vehicle to review the recorded characteristics and review how the recorded characteristics affect a cost of insurance;  
means for the party to control whether to submit the recorded characteristics to an insurer through a publicly accessible distributed network;  
means for assigning a level of risk to the operation of the vehicle based, at least in part on, the recorded characteristics; and  
means for determining a cost of an insurance policy based on the assigned level of risk.

182. (New) The system of claim 181 further comprising means for writing and recording location data within the device and means for associating the location information to the level of risk of operating the vehicle.

183. (New) The system of claim 181 where the device that writes and records characteristics related to the level of risk of operating the vehicle through the automotive communication link comprises a portable plug-in module that does not lose its content when the portable plug-in module is not connected to a vehicle power source.

184. (New) The system of claim 183 where the portable plug-in module is configured to interface an on board diagnostic port coupled to a vehicle bus that is in communication with a first processor local to the vehicle and is configured to interface a second processor remote from the vehicle.

185. (New) The system of claim 181 where the device that writes and records characteristics related to the level of risk of operating the vehicle through the automotive communication link and the means for the party to control whether to submit the recorded characteristics to the insurer through the publicly accessible distributed network comprises factory installed original equipment.

186. (New) The system of claim 181 where the characteristics related to the level of risk of operating the vehicle comprise data related to a driver's operating behavior.

187. (New) The system of claim 181 where the characteristics related to the level of risk of operating the vehicle comprises data generated by a single vehicle sensor.

188. (New) The system of claim 181 where the characteristics related to the level of risk of operating the vehicle consists of mileage data.

189. (New) The system of claim 181 where the device is configured to receive and record data received from an accelerometer that measures the vehicle's acceleration or deceleration.

190. (New) The system of claim 181 further comprising a timing device that time-stamps the characteristics related to the level of risk of operating the vehicle by generating timing information that is written to a memory of the device.

191. (New) The system of claim 190 where the timing information comprises a time of day information.

192. (New) The system of claim 181 where the level of risk comprises a safety score.

193. (New) The system 181 where the level of risk comprises a rating factor that is processed to generate a percentage discount or a surcharge to the cost of the insurance policy.

194. (New) The system of claim 181 where the means for the party associated with the vehicle to review how the recorded characteristics affect a cost of insurance to the user comprises means for reviewing how the recorded characteristics affect a prospective cost of insurance.

195. (New) The system of claim 181 where the means for assigning the level of risk to the operation of the vehicle based on the recorded characteristics resides on a Web server remote from the means for the party associated with the vehicle to review the recorded characteristics and review how the recorded characteristics affect the cost of insurance.

196. (New) A system for monitoring, pricing, and providing a distance-based vehicle insurance comprising:

- an input device configured to interface and communicate with a vehicle bus that transfers information to and from in-vehicle devices;

- a first processor that copies distance-based data repetitively from the vehicle bus through the input device;

- a memory that retains the distance-based data copied from the vehicle bus at a predetermined interval, the memory retains the content when not connected to a vehicle power source; and

- a second processor that assigns a level of insurable risk to a vehicle operator based at least in part on the distance-based data written to the memory.

197. (New) The system of claim 196 where the level of insurable risk comprises a rating factor used by the second processor to determine a cost of insurance, where the distance-based data comprises mileage data.

198. (New) The system of claim 197 where the cost of insurance comprises a future cost for insurance coverage.

199. (New) The system of claim 196 further comprising a global positioning system that generates location information, the first processor writes the location information received from the locating system to the memory at the predetermined interval, and the second processor assigns the level of risk to the vehicle operator based at least in part on the distance-based data and the location information.

200. (New) A risk management system comprising:

a network server system that provides an interface having the functionality for establishing relationships between users that track their vehicle data and levels of risk in a usage based insurance system;

a database that stores relationship data indicating the relationships established between a plurality of users and an insured's monitored vehicle data, where the relationship data identifies, for each selected user, relationships between relative levels of risk and the monitored vehicle data; and

an interface module that provides functionality to search the database for a risk assessment of vehicle data, where the interface module is responsive to a request from a user by using the relationship data and the monitored vehicle data to identify other user's level of risk.

201. (New) A system that monitors data transferred among components within a vehicle that is used to determine one or more levels of risk or is used to determine a cost of insurance comprising:

a vehicle bus that is used to send and receive data within a vehicle;

an in-vehicle monitor that filters the data that is sent and received across the vehicle bus by selectively acquiring vehicle data related to a level of risk in operating the vehicle or an insurable risk, the selected vehicle data is acquired at a predetermined interval from one or more vehicle sensors;

a processor programmed to write and retrieve the selected vehicle data acquired by the in-vehicle monitor at a predetermined interval;

a memory that retains the selected vehicle data, the memory retains the selected vehicle data when not connected to an in-vehicle power source or an out of vehicle power source; and

a transmitter configured to electrically encode the selectively acquired vehicle data related to a level of risk in operating the vehicle or an insurable risk read from the memory and send the encoded data through a publicly accessible distributed network.

202. (New) The system of claim 201 where the in-vehicle monitor comprises a wireless monitor that comprises a short range radio link that enables data communication to a range that does not exceed ten meters.

203. (New) A system of claim 201 where the transmitter comprises a wireless transmitter-receiver configured to receive a new release of an existing software product within the system.

204. (New) A system of claim 201 where the one or more vehicle sensors comprises a single sensor that detects or measures a condition by converting a non-electrical energy into an electrical energy.

205. (New) A system that monitors data collected from a vehicle bus that is used to determine a cost of insurance comprising:

- a data monitor that monitors a vehicle bus that transfers data among electronic components within a vehicle;

- a portable storage device that receives vehicle data from the vehicle bus to a first memory within the vehicle, the portable storage device retains content when not connected to a vehicle power source;

- a second memory within the portable storage device that receives meta data that is logically linked to the vehicle data written to the portable storage device within the vehicle each time the vehicle data is written to the portable storage device;

- a first processor programmed to link the portable storage device to a network of computers associated with an identifying number on a publicly accessible distributed network and is accessible through software that allows access to insurance files related to an existing insurance policy or a renewal of an insurance policy and allows access to other software related to the insurance files;

- a database operatively linked to the portable storage device to store the vehicle data and the meta data written to the portable storage device, the database comprising a storage system of records; and

- a second processor programmed to generate a rating factor based on the vehicle data and meta data written to the database;

- where the second processor is programmed to calculate an insurance rate or a surcharge to a premium of an insurance policy based on the vehicle data and the meta data stored in the database or a discount to the premium of the insurance policy based on the vehicle data and the meta data stored in the database.

206. (New) A method of determining a level of risk involving the operation of a vehicle consists of:

- monitoring a data transfer among operating sensors of a vehicle;
- selecting vehicle data automatically from a data stream within the vehicle;
- retaining the vehicle data in a format that can be stored and retrieved; the vehicle data is stored at a programmed interval and is retained independently of in-vehicle devices that control engine functions, manage powertrain functions, or provide entertainment and comfort functions;
- receiving the vehicle data from a communication link that is remote from the vehicle; and
- determining a level of risk based on the vehicle data transmitted via the communication link.

207. (New) The method of claim 206 further comprising estimating a plurality of positions of the vehicle by trilaterating a plurality of radio navigation signals and determining the level of risk based on the estimated plurality of positions and the vehicle data.

208. (New) The method of claim 206 where the format comprises a portable format configured to run on one or more in-vehicle systems and remote computer systems and the communication link comprises a wireless link.

209. (New) The method of claim 206 further comprising retaining data that measures the vehicle's acceleration or deceleration and determining the level of risk based on the vehicle data and the acceleration or deceleration data.

210. (New) The method of claim 206 further comprising time-stamping the vehicle data as it is stored at the programmed interval.

211. (New) The method of claim 206 further comprising determining a rating factor based on the vehicle data and setting or adjusting a cost of insurance based on the rating factor.

212. (New) The method of claim 206 where the vehicle data consists of data derived from a device that measures a single parameter.

213. (New) The method of claim 206 where the vehicle data consists of mileage data.

214. (New) The method of claim 206 where the level of risk is based on a driver's actual operating behavior and the data is received through a wireless link.

215. (New) A data logging system that tracks the operation of a vehicle, comprising:

- a removable storage device comprising a first memory portion that may be read from and is written to in a vehicle and a second memory portion that may be read from and is written to in the vehicle, the second memory portion retains attributes of data logically associated with each data item stored in the first memory portion;

- a central processing unit that reads data from an automotive bus that transfers data from vehicle sensors to other automotive components and writes the data to the first memory portion; and

- a communication device that links the removable storage device to a network of computers associated with an identifying number on a publicly accessible distributed network and is accessible through software that allows a user to access files related to a measured level of risk related to an operation of a vehicle;

- where the first memory portion and the second memory portion retain data when a vehicle power source is not coupled to the first memory portion and the second memory portion, respectively.

216. (New) The data logging system of claim 215 further comprising a navigation tracking system in communication with the central processing unit, the navigation tracking system being programmed to process continuously transmitted coded data used to identify a location of the vehicle.



217. (New) The data logging system of claim 215 where the first memory portion retains data related to driving behavior and the communication device comprises a wireless communication device.

218. (New) The data logging system of claim 217 where the central processing unit is configured to record an output of a sensor that detects or measures a single condition by converting a non-electrical energy into an electrical energy.

219. (New) The system of claim 215 where the measured level of risk comprises a safety score for operating the vehicle.

220. (New) The system of claim 215 where the attributes of data comprises a time stamp identifying a time of day.

221. (New) The data logging system of claim 215 where the central processing unit is operative to identify or derive acceleration or deceleration data from the automotive bus and record the acceleration or deceleration data in the first memory portion and further stores a corresponding timestamp of a current time the acceleration or deceleration data is stored in the second memory portion.

222. (New) The data logging system of claim 215 where the central processing unit is programmed to scramble an access code to the data written to the first memory portion.